

Remarks

The application is reviewed in light of the Office Action of January 16, 2004. By the foregoing Amendments, claims 1-4 are amended, and new claims 5-12 are added. No new matter is introduced by the Amendments.

The Examiner has objected to the Specification and Abstract because of certain informalities. Such informalities and errors have been corrected by the foregoing Amendments.

The Examiner has objected claim 2 because of certain informalities. Such informalities have been corrected by the foregoing Amendments.

In addition, claims 1-4 have been amended to correct informalities and further to particularly point out the invention.

The Examiner has rejected claim 4 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out the invention and distinctly claim the subject matter which applicant regards as the invention. Claim 4 has been amended to overcome this rejection.

The Examiner has rejected claims 1-3 under 35 U.S.C. 102(b) as being anticipated by Cruse (U.S. Patent No. 3,385,636). Applicant respectfully submits that claims 1-3 as amended are patentable over Cruse.

Claims 1-3 of the invention require that the service brake actuator has a rotative motor as its service brake applying means, and that the energy from a loaded spring in a spring brake actuator is released at will for supplying supplementary service brake energy to the service brake actuator.

Cruse discloses a combined service and auxiliary brake actuator wherein the auxiliary brake actuator is manually controlled.

Cruse however fails to disclose or teach the above-identified feature of the invention. In particular, the auxiliary brake actuator of Cruse does not provide a rotative motor as its service brake applying means. Applicant respectfully disagrees with the Examiner's reasoning that the compressor 2 can be interpreted as the rotative motor of the invention since the compressor does in fact supply pressurized fluid to the actuator. Although a compressor can be used to supply energy to an actuator, such a compressor is not a rotative motor as required by the invention. As is well known in the art, a rotative motor is a machine element which utilizes its rotational force to drive a rotatable member for performing certain mechanical functions (for example, in the present invention, the rotative motor rotates the drive shaft 3' which works as service brake applying means). Contrary thereto, a compressor is a machine element for providing pressurized fluid to a fluid-operable apparatus and does not utilized any of its rotational force to drive a rotatable member. Therefore, it is respectfully submitted that the compressor 2 of Cruse cannot be interpreted as a rotative motor as its service brake applying means as required by the invention.

Moreover, Cruse further fails to disclose or teach that the energy from a loaded spring in a spring brake actuator is released at will for *supplying supplementary service brake energy* to the service brake actuator. As specifically described in the specification, the service brake actuator of the present invention can be dimensioned to take care of "normal" brake applications (and thus, can be reduced in size), whereas energy from the spring brake actuator is added for example when the needed energy is above the capacity of the service brake actuator. See, in particular, paragraphs [0008] and [00010] of the specification. Unlike the claimed invention, in Cruse, the compression spring 42 of the auxiliary brake actuator does not supply *supplementary service brake energy* to boost the capacity of the service brake actuator, thus the service brake actuator is not contemplated to be dimensioned in a reduced size. As stated in column 4, lines 33-43 of Cruse, the fluid-operable auxiliary brake actuator having the compression spring 42 therein is designed to use under emergency operating conditions in the event of fluid pressure loss from the main reservoir 3 due to a malfunctioning compressor and/or leaks in the system 1, in other words, when the

system loses its full capacity from malfunctioning. In addition, the auxiliary brake actuator is operable by the operator's *manual* actuation of the hand valve 12. Thus, the energy from the auxiliary brake actuator (having a compressed spring therein) is not released at will for supplying *supplementary service brake energy* to the service brake actuator, for example, when the needed energy is above the capacity of the service brake actuator.

Accordingly, in view of the foregoing, claims 1-3 of the invention are patentably distinct from Cruse.

Applicant respectfully submits that newly introduced claims 5-12 are also patentably distinct over Cruse and any of the prior art of record, at least for the similar reasons as discussed above.

Applicant gratefully acknowledges the Examiner's indication of allowability of claim 4 if rewritten to overcome the above-mentioned rejection under 35 U.S.C. 112, second paragraph, and to include all of the limitations of the base claim and any intervening claims. Applicant respectfully submits that claim 4 as amended are now in condition for allowance.

Accordingly, applicant submits that all of the claims currently pending in the application are now in condition for allowance. Early notice to that effect is respectfully requested.

Respectfully submitted,



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